

ON A COLLECTION OF HETEROPTERA (HEMIPTERA)
FROM THE GALÁPAGOS ISLANDS

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One of us (JV) recently spent a total of 24 months in the Galápagos Islands, between 1970 and 1974. Although his major interests lay in other directions, he collected several species of Heteroptera in the year 1971-1972. Despite its small size, the collection is of considerable interest because it was made in several islands not usually visited by collectors, and because valuable habitat notes were taken. In addition, several species new to science were collected; these have been described elsewhere (Villiers, 1978), and are also listed here.

Here we list these specimens with their distributions and notes on their habitats. Distributions of these species published up to 1965 are taken from Linsley and Usinger (1966), and those published subsequently are taken from various papers, as cited.

The names of the islands are the official Ecuadorian ones, from Bowman (1966:xvii). However, in transcribing label data, English names are sometimes used. Most specimens, except for types of new species, are in the California Academy of Sciences; a few specimens are in the collection of J. A. Slater (Univ. Conn.).

In general, the lower the elevation the drier the habitat, and northern slopes are drier than southern ones. The smallest islands are low in elevation, hence only provide dry-zone habitats. With increasing size, elevation also increases, and as a consequence, transitional, rain forest and fern-grass-sedge zone habitats are added. The only notable exception is provided by Pinta Island, which combines a relatively small area with a relatively high elevation. In the habitat notes that accompany each species' account, it may be taken that elevations up to 50' are dry, 50-500' are intermediate, 500-

Table 1. Monthly mean temperatures (°C) (1964–1971) at two elevations on Santa Cruz (from Ecuadorian Ministry of Agriculture. "Recursos del Archipiélago de Colón," 1973).

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Over- all avg.
6 meters	24.6	26.1	26.2	26.1	24.0	23.4	22.1	21.4	21.4	21.8	22.5	23.3	23.8
	average precipitation for this period, 372.6 mm/year												
200 meters	23.4	24.2	24.7	24.4	23.3	21.5	21.3	19.4	19.4	19.7	20.3	21.3	21.9
	average precipitation for this period, 1113.4 mm/year												

1000' are moist (rain-forest), and above 1000' are a fern-grass-sedge zone (see sample data in Table 1). It should be noted that the year in which these collections were made (1971–1972) was an unusually wet one. See Palmer and Pyle (1966) and Wooster and Hedgpeth (1966) for a more general and more complete account of Galápagos climate and habitats.

CYDNIDAE

Dallasiellus murinus (Van Duzee)

Previous island records: Isabela, San Cristóbal, Santa Cruz, Santa María, Fernandina (Froeschner, 1968).

Present island record: Pinta (new island record) 3 ♀, 3 ♂, 1 fourth instar, "Abingdon I/Galapagos/XII.2.71/J. Vagvolgyi."

Previous biological notes: "at lights," "in litter," "under bunchgrass," fourth and fifth instars collected on II/26 (quotes and data from label-data cited in Froeschner, 1968).

Habitat notes: Collected in saddle between main and secondary peaks elev. about 400 m (1300'); "pampas" grass and *Opuntia*; specimens collected from bases of grass and from rocks made by the collapse of lava "bubbles." No recent rain, but had been wet from May–Nov. previously.

PENTATOMIDAE

Acrosternum viridans (Stål)

Previous island records: Isabela, San Cristóbal, Santa Cruz, San Salvador (from Linsley and Usinger, 1966).

Present island record: Santa Cruz, 2 ♀, 1 ♂, "Puerto Ayora/Indefatigable I/Galapagos/Dec.–March, 1971–2/J. Vagvolgyi/at lights."

Habitat notes: Elev. 12–15 m (40–50'), "dry" zone, at lights.

Podisus sordidus (Stål)

Previous island records: Santa María, Santa Cruz, San Cristóbal, Isabela (from Linsley and Usinger, 1966).

Present island record: Santa Cruz, 2 ♀, 1 ♂, "Puerto Ayora/Indefatigable I/Galapagos/Dec.–March, 1971–2/J. Vagvolgyi/at lights." Seymour (new island record) 1 ♀, 1 ♂, "North Seymour I/Galapagos/IV.23.72/J. Vagvolgyi."

Habitat notes: Santa Cruz: Elev. 12–15 m (40–50'), "dry" zone. Seymour: low and flat; mostly covered with high grass and palo santo (*Bursera*) trees, with some large boulders. Specimens collected from litter under trees and around boulder; vegetation "beautiful and green."

RHOPALIDAE

Harmostes disjunctus Barber

Previous island records: Santa Cruz, Isabela (from Linsley and Usinger, 1966).

Present island record: San Salvador (new island record), 1 ♀, 1 ♂, "James I/Galapagos/XII.10.71/J. Vagvolgyi."

Habitat notes: "On ground/800–1000' elev." (label). Southwest corner of island, near salt mine, on inside of northern slope of larger volcano. *Macraea* bush dominant large vegetation. Collected under small easily pulverized stones. "Dry" zone.

Liorhyssus hyalinus (F.)

Previous island record: Daphne Major, Genovesa (from Linsley and Usinger, 1966).

Present island record: Sombrero Chino (new island record), 1 ♀, 1 ♂, "Trenton I./Galapagos/IV.22.72/J. Vagvolgyi/on ground."

Habitat notes: Sombrero Chino (English = Trenton), an island with sparse vegetation, off the southeast corner of San Salvador I. Specimens collected where soil had accumulated among rocks in lava-flow depression. 9–12 m (30–40') elev. Vegetation low, herbaceous, unusually green because, although the island normally dry, had recently rained.

Jadera sanguinolenta (F.)

Previous island record: Wolf (from Linsley and Usinger, 1966).

Present island record: Santa Cruz (new island record), 1 ♂, at Puerto Ayora, "Puerto Ayora/Indefatigable I/Galapagos/Dec.–March, 1971–2/J. Vagvolgyi/at lights." Macropterous specimen (Heidemann [1901] reports 2 of 4 specimens brachypterous).

Habitat notes: see *Acrosternum viridans* (Stål).

LYGAEIDAE

Darwinysius marginalis (Dallas)

Previous island records: Santa María, San Salvador, Daphne Major (from Linsley and Usinger, 1966).

Present island records: Sombrero Chino (new island record), 1 ♀, "Trenton I/Galapagos/IV.22.72/J. Vagvolgyi/on ground." Beagle (new island record), 3 ♀, 2 ♂, "Beagle I/Galapagos/IV.22.71/J. Vagvolgyi."

Habitat notes: Feeding on *Portulaca* seeds beneath plant (Ashlock, 1972).

Sombrero Chino: see *Liorhyssus hyalinus* (F.). Beagle: under *Portulaca*; 60 M (200') elev. "Dry" zone.

Pachybrachius insularis (Barber)

Previous island records: Baltra, San Salvador, Isabela, Santa Cruz (from Linsley and Usinger, 1966); Santa María, Fernandina (Ashlock, 1972).

Present island records: Pinta (new island record), 1 ♀, "Abingdon I/Galapagos/XII.2.71/J. Vagvolgyi." Santa Cruz, 1 ♀, at Puerto Ayora, "Puerto Ayora/Indefatigable I/Galapagos/Dec.March, 1971-2/J. Vagvolgyi/at lights."

Habitat notes: At lights, forest floor (Ashlock, 1972). Pinta: see *Dallasiellus murinus* (Van Duzee). Santa Cruz: see *Acrosternum viridans* (Stål).

Pseudopachybrachius nesovinctus (Ashlock) NEW COMBINATION

Previous island records: Santa Cruz, Fernandina (Ashlock, 1972).

Present island records: Pinta (new island record), 1 ♀, Abingdon I/Galapagos/XII.2.71/J. Vagvolgyi."

Habitat notes: See *Dallasiellus murinus* (Van Duzee).

Heraeus pacificus Barber

Previous island records: San Salvador (from Linsley and Usinger, 1966); Santa Cruz, Santa María (Ashlock, 1972).

Present island records: Santa Cruz, 3 ♀, "Puerto Ayora/Indefatigable I/Galapagos/Dec.-March, 1971-2/J. Vagvolgyi/at lights."

Habitat notes: at light, grassland, 550 m (1800') (Ashlock, 1972). Santa Cruz: see *Acrosternum viridans* (Stål).

ANTHOCORIDAE

Lasiochilus pallidulus Reuter

Previous island record: Santa Cruz (Herring, 1966).

Present island record: Santa Cruz, 11 ♀, "Puerto Ayora/Indefatigable I/Galapagos/Dec.-March, 1971-2/J. Vagvolgyi/at lights."

Habitat notes: see *Acrosternum viridans* (Stål).

NABIDAE

Nabis consimilis (Reuter)

Previous island records: Santa María, Isabela, San Salvador, Santa Cruz (Kerzhner, 1968).

Present island records: Pinta, 1 ♀, 1 fourth instar, (new island record), "Abingdon I/Galapagos/XII.2.71/J. Vagvolgyi." Santa Cruz, 2 ♀, 2 ♂, "Puerto Ayora/Indefatigable I/Galapagos/Dec.–March, 1971–2/J. Vagvolgyi/at lights."

Habitat notes: Pinta: see *Dallasiellus murinus* (Van Duzee). Santa Cruz: see *Acrosternum viridans* (Stål).

MIRIDAE

Fulvius geniculatus Van Duzee

Previous island records: San Salvador, Rabida, San Cristóbal, Santa María, Fernandina (from Linsley and Usinger, 1966); Santa Cruz (Carvalho and Gagné, 1968).

Present island records: Pinta (new island record), 1 teneral ♀, 4 ♂, "Abingdon I/Galapagos/XII.2.71/J. Vagvolgyi."

Habitat notes: see *Dallasiellus murinus* (Van Duzee).

Psallus insularis Barber

Previous island records: San Salvador (from Linsley and Usinger, 1966); Santa Cruz, Darwin, Isabela, San Cristóbal, Santa María, Pinta, Fernandina (Carvalho and Gagné, 1968).

Present island record: Santa Cruz, 3 ♀, "Puerto Ayora/Indefatigable I/Galapagos/Dec.–March, 1971–2/J. Vagvolgyi/at lights."

Habitat notes: see *Acrosternum viridans* (Stål).

Cyrtopeltus (Engytatus) modestus (Distant)

Previous island records: Santa Cruz (from Linsley and Usinger, 1966); Santa María, San Salvador (Carvalho and Gagne, 1968).

Present island record: Santa Cruz, 1 ♂, "Puerto Ayora/Indefatigable I/Galapagos/Dec.–March, 1971–2/J. Vagvolgyi/at lights."

Habitat notes: see *Acrosternum viridans* (Stål).

Cyrtopeltus (Engytatus) sp. prob. nov.

A series of specimens, comprising both sexes and some immatures, was swept from grass on Pinta Island, XII.2.71, by J. Vagvolgyi. Unfortunately, the condition of the specimens is too poor to permit identification; but the likelihood that they represent a new species is suggested by Dr. Wagne Gagné (pers. commun., 1978), and by their having been found on Pinta Island. As Carvalho and Gagné (1968) and Usinger (1972:278) note, Galápagos species of *Cyrtopeltus* are quite island-specific. Pinta is some distance

from other islands and these are the first *Cyrtopeltus* to be collected from it. The chances are good that they are new, and specimens in better condition would be welcome.

Dolichomiris linearis Reuter

Previous island records: Fernandina, Santa Cruz, San Salvador, Isabela, (Carvalho and Gagné, 1968).

Present island records: Pinta (new island record), 2 ♀, 1 ♂, 5 first, 2 second, 7 third, 3 fourth instars, "Abingdon I/Galapagos/XII.2.71/J. Vagvolgyi."

Habitat notes: "Swept from grass" (label); otherwise see *Dallasiellus murinus* (Van Duzee).

REDUVIIDAE

Ploiaria macrophthalma (Dohrn)

Previous island record: Santa Cruz (Villiers, 1970).

Present island record: Santa Cruz, 3 ♂, 1? (abdomen missing), "Puerto Ayora/Indefatigable I/Galapagos/Dec.-March, 1971-2/J. Vagvolgyi/at lights."

Habitat notes: see *Acrosternum viridans* (Stål).

Ghinallelia galapagensis Heidemann

Previous island records: Isabela, Española (from Linsley and Usinger, 1966).

Present island record: Española, 2 specimens, "Bahia Gardner/Galapagos/III.29.72."

Habitat notes: Peak near Bahia Gardner, northeast part of Isla Española; 170 m (550'), both northeastern and southwestern sides of peak; under rocks and on terraces bearing litter and logs, and in crevices. *Cordia* bushes dominant vegetation. Had recently rained.

Ghinallelia leleuporum Villiers

Previous island record: Santa Fé (Villiers, 1970).

Present island record: Santa Fé, 1 specimen, "Barrington I/Galapagos/III.3.72/J. Vagvolgyi."

Habitat notes: Central peak of Santa Fé, 213 m (700'), under rocks on inward slopes of hills. *Opuntia* spp., *Bursera*s, *Cordia* dominant.

Ghinallelia vagvolgyianus Villiers

Present island records [type series]: Rabida, 3 ♀, 2 ♂, "Jervis I./Galapagos/IV.21.72/J. Vagvolgyi." And "1000 ft. elev."

Habitat notes: Steep western cliffs of the eastern peak of Isla Rabida, 1000-1100', under rocks; entire area (including rocks) covered with vegetation; some *Acacia*, many *Cordia*, *Croton*, and other bushes; rather dry.

Ghinallelia schaeferi Villiers

Present island record [holotype]: Rabida, 1 ♀, "Jervis I./Galapagos/IV.21.72/J. Vagvolgyi."

Habitat notes: see *Ghinallelia vagvolgyianus* Villiers.

Note.—Wygodzinsky (1966) notes that the Emesinae are likely to be the major reduviid group on islands, but not on mainlands; he attributes this phenomenon to the high "spread potential" (Leston, 1957) of the Emesinae.

However, our records suggest that the concept of spread potential requires some modification, at least for the Emesinae. For the large amount of speciation on these island-groups indicates that inter-island movement is restricted.

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ZOOLOGICAL NOMENCLATURE

AN(S) 109

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The Commission hereby gives six months notice of the possible use of its plenary powers in the following cases, published in *Bull. zool. Nom.* vol. 35, part 4, on 31 May 1979, and would welcome comments and advice on them from interested zoologists. Correspondence should be addressed to the Secretary at the above address.

2161 *Lethocerus* Mayr, 1853 (Insecta, Hemiptera, Belostomatidae); proposed conservation in place of *Iliastus* Gistel [1847].

2234 *Lespesia* Robineau-Desvoidy, 1863; proposed designation of a type species under the plenary powers (Diptera, TACHINIDAE).

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AN(S) 110

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The Commission hereby gives six months notice of the possible use of its plenary powers in the following cases, published in *Bull. zool. Nom.* vol. 36, part 1, on 1 July 1979, and would welcome comments and advice on them from interested zoologists. Correspondence should be addressed to the Secretary at the above address.

2255 *Tipula ferruginea* Fabricius, 1805 (Diptera, TIPULIDAE): proposed conservation.

2221 “*Staphylinus fulgidus*” as the type species of several nominal genera (Coleoptera, STAPHYLINIDAE).

2044 *Phytoptus avellanae* Nalepa, 1899 (Acarina): proposed suppression of unused senior synonyms.